

# Vermont Payment for Ecosystem Services and Soil Health Working Group

Summary of Meeting #29: Tuesday, September 20, 2022

More detailed information, including presentation slides and the meeting recording can be found at <https://agriculture.vermont.gov/pes>.

## Introduction

The Payment for Ecosystem Services (PES) and Soil Health Working Group held its twenty-ninth meeting on Tuesday, September 20, 2022. The objectives of the meeting were to review Working Group progress over the past 3 years, review draft pilot design options, and discuss a timeline for work for the rest of the year.

## Summary of discussion

Pat Field, Consensus Building Institute facilitator, reviewed Working Group progress from the past three years. Key activities included: hosting webinars in 2019; submitting an initial report with recommendations to the Legislature in January 2020; work in task groups (soil health, economics, and program development); engagement with NRCS on agroforestry practices; farmer-developed proposals; presentations to the Working Group on VAAFM and NRCS programs, biodiversity metrics, and the California Healthy Soils Program; UVM research work; and development of the Working Group's program framework and goals. Working Group members also underscored the importance of the [February 2019 letter from farmer watershed groups](#) which inspired the formation of the Working Group. The Working Group's two major tasks for the rest of the year are: 1) detailed program advice and support for a way forward on a pilot PES program for 2023 using the \$1 million in the FY 2023 budget; and 2) a report to the Legislature due January 15, 2023.

Afterward, Ryan Patch, Sonia Howlett, and Judson Peck, VAAFM staff, presented the 5 draft program options as follows:

1. Soil health testing via Cornell Comprehensive Assessment of Soil Health (CASH) tests;
2. Soil carbon testing via soil bulk density tests;
3. Soil carbon modeling via a process-based model;
4. In-field observation with modeling assessment; and
5. In-field observation (with rubric-based assessment).<sup>1</sup>

It is important to note that VAAFM developed the draft approaches independently, but they can be combined and hybridized for a program. Key points from discussions are as follows:

- The CASH score does not explicitly link to any ecosystem service but assumes that all ecosystem services are bundled together under the soil health assessment.
- The soil testing methods raise questions about the need for 3<sup>rd</sup> party verification, though there is a tension between being prescriptive and lacking control over how individuals arrive at their outcomes.

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<sup>1</sup> These are available at <https://agriculture.vermont.gov/pes/past-meetings> along with a summary matrix.

- The soil carbon modeling approach relies on the APEX model, which is limited to conventional crops and does not account for diverse cropping systems (at this time).
- It may be worth considering whether the payment mechanism for carbon modelling would lock farmers into a particular price if the price of carbon in markets outside of Vermont were to increase substantially. Individuals cannot sell a unit of carbon for credits twice, though the draft program proposes annual payments which allows for some flexibility.
- Draft approach 4 uses NRCS' RSET assessment tool, which uses an online interface.<sup>2</sup> There are also concerns around data interoperability and whether it may be worth interfacing the various interfaces. Travis Thomason, State Conservationist, also outlined that NRCS conservation planning has certain requirements, then additional questions based on individual producers' needs. He suggested that if the PES program, conservation districts, and NRCS could agree on minimum requirements, he could set those forth as state conservationist.
- Working group members expressed concerns about how long it would take for farmers to receive payments under the CASH testing option (5 years), the limitations of the APEX model for diversified farms, and whether the gap between payment rates and farmers' willingness to accept would create a barrier for enrolment. Working Group members also expressed a desire to create a program that can be replicated nationally, potentially in partnership with NRCS and EPA.

Afterward, Working Group members Cat Buxton and Maddie Kempner shared a proposal on "VAWQP / PES Agriculture Service Provider Research to Inform Programmatic Improvements". They shared that the goal of the proposal is to take a step back and streamline existing programs, and it would involve doing research on creating farm teams that assist farmers with accessing existing programs. It would be similar to an "early-intervention" service for farmers it would help with supporting farmers on the path to enrolling for larger programs. Working Group members generally supported the intention of the proposal and recognized that it can be onerous for farmers to navigate the network of programs.

Finally, Working Group members discussed a timeline for work for the remainder of the year. Key activities include 1) constituency outreach in October on the program options; and 2) an in-person meeting, tentatively set for the first week of November in Waterbury.

Working Group members recognized the hard work done by VAAFM and each other over the summer to bring pilot program options to fruition.

Public comment included comments from Jennifer Byrne (White River NRCD) and Caroline Gordon (Rural Vermont) in support of the proposal shared by Cat Buxton and Maddie Kempner. Stephen Leslie submitted a document on the "VT Healthy Soil Protection & Restoration Act – Soil Health Management Systems".

The meeting was adjourned at 3:45 PM.

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<sup>2</sup> Travis Thomason, State Conservationist, clarified that NRCS still supports RSET, mostly for Vermont, but does actively update it. NRCS' goal is to make the more detailed analysis in RSET available in CART (NRCS' current assessment tool) for nutrients and pest. The other issues should align already. At that point NRCS will either make CART available to partners or make RSET publicly accessible.

## Attachments

1. Letter from Paul Doton
2. "VAWQP / PES Agriculture Service Provider Research to Inform Programmatic Improvements", Buxton et al.
3. "VT Healthy Soil Protection & Restoration Act – Soil Health Management Systems", Stephen Leslie